

09/632739



JAPANESE PATENT OFFICE

JP1024414

PATENT ABSTRACTS OF JAPAN

VAPOR GROWTH EQUIPMENT

Publication date: 1989-01-26

Inventor(s): KOAIZAWA HISASHI; others: 03

Applicant(s):: FURUKAWA ELECTRIC CO LTD:THE

Application Number: JP19870179889 19870721

Priority Number(s):

IPC Classification: H01L21/205

EC Classification:

RECEIVED
OCT 28 2002
TECHNOLOGY CENTER/R3700

Abstract

PURPOSE:

To avoid disturbance in a gas flow when an inner tube is housed in a chamber and obtain a vapor growth equipment with a simple construction by a method wherein a small diameter part is provided as the upstream side of the chamber and a large diameter part is provided as the downstream side of the chamber with a stepped part provided in the middle of the chamber as a boundary and, further, an extension protruding into the large diameter part from the stepped part is provided on the small diameter part and an inner tube is provided in the large diameter part while one end of the inner tube is mated with the outer circumference of the extension.

CONSTITUTION:

The upstream side part and the downstream side part of a chamber 3 with a circular cross-section with a stepped part 3A as the center are formed as a small diameter part 3B and a large diameter part 3C respectively. An extension 3D with the diameter same as the diameter of the small diameter part 3B is provided on the small diameter part 3B so as to protrude into the large diameter part 3C from the stepped part 3A. An inner tube 4 is composed of a cylinder part 4A with an inner diameter approximately same as the outer diameter of the extension 3D, a tapered part 4B whose cross-section is converted from a circular shape into a square shape gradually and a square tube part 4C continuous from the end of the tapered part 4B. The inner tube 4 is provided in the large diameter part 3C of the chamber 3 while its cylinder part 4A is mated with the outer circumference of the extension 3D. With this constitution, the inner tube does not protrude into the chamber and the gas flow is not disturbed and, further, it is not necessary to provide an additional auxiliary tube in the chamber.

Best Available Copy

THIS PAGE BLANK (USPTO)